API Well Number: 43047521060000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

	1. WELL NAME and NUMBER LCU 7-36F
2. TYPE OF WORK DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○	**3. FIELD OR WILDCAT** NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO	**5. UNIT or COMMUNITIZATION AGREEMENT NAME** LITTLE CANYON
6. NAME OF OPERATOR XTO ENERGY INC	**7. OPERATOR PHONE** 505 333-3145
8. ADDRESS OF OPERATOR 382 Road 3100, Aztec, NM, 87410	**9. OPERATOR E-MAIL** Kelly_Kardos@xtoenergy.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML-47391	**11. MINERAL OWNERSHIP** FEDERAL ○ INDIAN ○ STATE ◉ FEE ○
	12. SURFACE OWNERSHIP FEDERAL ○ INDIAN ○ STATE ◉ FEE ○
13. NAME OF SURFACE OWNER (if box 12 = 'fee')	**14. SURFACE OWNER PHONE (if box 12 = 'fee')**
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')	**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS** YES ○ (Submit Commingling Application) NO ◉
	19. SLANT VERTICAL ◉ DIRECTIONAL ○ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1991 FNL 2059 FEL	SWNE	36	10.0 S	20.0 E	S
Top of Uppermost Producing Zone	1991 FNL 2059 FEL	SWNE	36	10.0 S	20.0 E	S
At Total Depth	1991 FNL 2059 FEL	SWNE	36	10.0 S	20.0 E	S

21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 1991	**23. NUMBER OF ACRES IN DRILLING UNIT** 640
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1107	**26. PROPOSED DEPTH** MD: 9090 TVD: 9090
27. ELEVATION - GROUND LEVEL 5290	**28. BOND NUMBER** 104312762	**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE** 43-10447

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	9.625	0 - 2200	36.0	J-55 ST&C	8.4	Type V	362	1.92	12.8
							Type V	225	1.15	15.8
Prod	7.875	5.5	0 - 9090	17.0	N-80 LT&C	9.2	Premium Plus	463	3.12	11.6
							Class G	300	1.75	9.09

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	☑ COMPLETE DRILLING PLAN
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	☑ TOPOGRAPHICAL MAP

NAME Krista Wilson	**TITLE** Permitting Tech	**PHONE** 505 333-3647
SIGNATURE	**DATE** 10/10/2011	**EMAIL** krista_wilson@xtoenergy.com

API NUMBER ASSIGNED
43047521060000

APPROVAL

Permit Manager

RECEIVED: February 29, 2012

XTO ENERGY INC.

LCU 7-36F
APD Data
November 6, 2007

Location: 1991' FNL & 2059' FEL, Sec. 36, T10S,R20E **County:** Uintah **State:** Utah

GREATEST PROJECTED TD: 9090' MD OBJECTIVE: Wasatch/Mesaverde
APPROX GR ELEV: 5290' Est KB ELEV: 5304' (14' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 2200'	2200' to 9090'
HOLE SIZE	12.25"	7.875"
MUD TYPE	FW/Spud Mud	KCl Based LSND / Gel Chemical
WEIGHT	8.4	8.6-9.20
VISCOSITY	NC	30-60
WATER LOSS	NC	8-15

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes. The mud system will be monitored visually/manually.

2. CASING PROGRAM:

Surface Casing: 9.625" casing set at ± 2200' in a 12.25" hole filled with 8.4 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-2200'	2200'	36#	J-55	ST&C	2020	3.66	394	8.921	8.765	2.10	3.66	4.97

Production Casing: 5.5" casing set at ±9090' in a 7.875" hole filled with 9.2 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-9090'	9090'	17#	N-80	LT&C	6280	7740	348	4.892	4.767	1.83	2.25	2.25

Collapse and burst loads calculated at TVD with 0.1 psi/ft gas gradient back up.

3. WELLHEAD:

A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom (or slip-on, weld-on) and 11-3/4" 8rnd thread on top.
B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 5,000 psig WP, 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

4. CEMENT PROGRAM:

A. Surface: 9.625", 36#, J-55, ST&C casing to be set at ±2200' in 12.25" hole.

LEAD:
±362 sx of Type V cement (or equivalent) typically containing accelerator and LCM.
12.8 ppg yield 1.92 ft³/sx

TAIL:
225 sx of Type V cement (or equivalent) typically containing accelerator and LCM.
15.8 ppg yield 1.15 ft³/sx

Total estimated slurry volume for the 9.625" surface casing is 956.5 ft³. Slurry includes 35% excess of calculated open hole annular volume to 2200'.

B. Production: 5.5", 17#, N-80 (or equiv.), LT&C casing to be set at ±9090' in 7.875" hole.

LEAD:
±463 sx of Premium Plus V Blend. (Type V/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 11.6 ppg, 3.12 ft³/sk, 17.71 gal wtr/sx.

TAIL:
300 sx Class G or equivalent cement with poz, bonding additive, LCM, dispersant, & fluid loss mixed at 13.0 ppg, 1.75 cuft/sx, 9.09 gal/sx.

Total estimated slurry volume for the 5.5" production casing is 1971 ft³. Slurry includes 15% excess of calculated open hole annular volume.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 15% or greater excess. The cement is designed to circulate on surface and intermediate casing strings.

5. LOGGING PROGRAM:

A. Mud Logger: The mud logger will come on at intermediate casing point and will remain on the hole until TD. The mud will be logged in 10' intervals.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (9090') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (9090') to 2200'.

6. FORMATION TOPS:

FORMATION	Sub-Sea Elev. (@SHL)	TVD (@SHL)
Wasatch Tongue	1,565	3,744
Green River Tongue	1,240	4,069
Wasatch*	1,110	4,199
Chapita Wells*	370	4,939
Uteland Buttes	-820	6,129
Mesaverde*	-1,552	6,861
Castlegate	N/A	N/A
TD**	-3781	9090

** Primary Objective*

7. ANTICIPATED OIL, GAS, & WATER ZONES:

A.

Formation	Expected Fluids	Well Depth Top
Wasatch Tongue	Oil/Gas/Water	3,744
Green River Tongue	Oil/Gas/Water	4,069
Wasatch*	Gas/Water	4,199
Chapita Wells*	Gas/Water	4,939
Uteland Buttes	Gas/Water	6,129
Mesaverde*	Gas/Water	6,861
Castlegate	Gas/Water	N/A

A. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.
B. There are no known potential sources of H_2S.
C. Expected bottom hole pressures are between 4100 psi and 4600 psi.

8. BOP EQUIPMENT:

Surface will not utilize a bop stack.

Intermediate hole will be drilled using a diverter stack with rotating head rated at 250 psi w.p.

Production hole will be drilled with a 3000 psi BOP stack.

Minimum specifications for pressure control equipment are as follows:

Ram Type: 11" Hydraulic double ram with annular, 3000 psi w.p.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70% of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10% in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50% of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

a. when initially installed:

b. whenever any seal subject to test pressure is broken

c. following related repairs: and

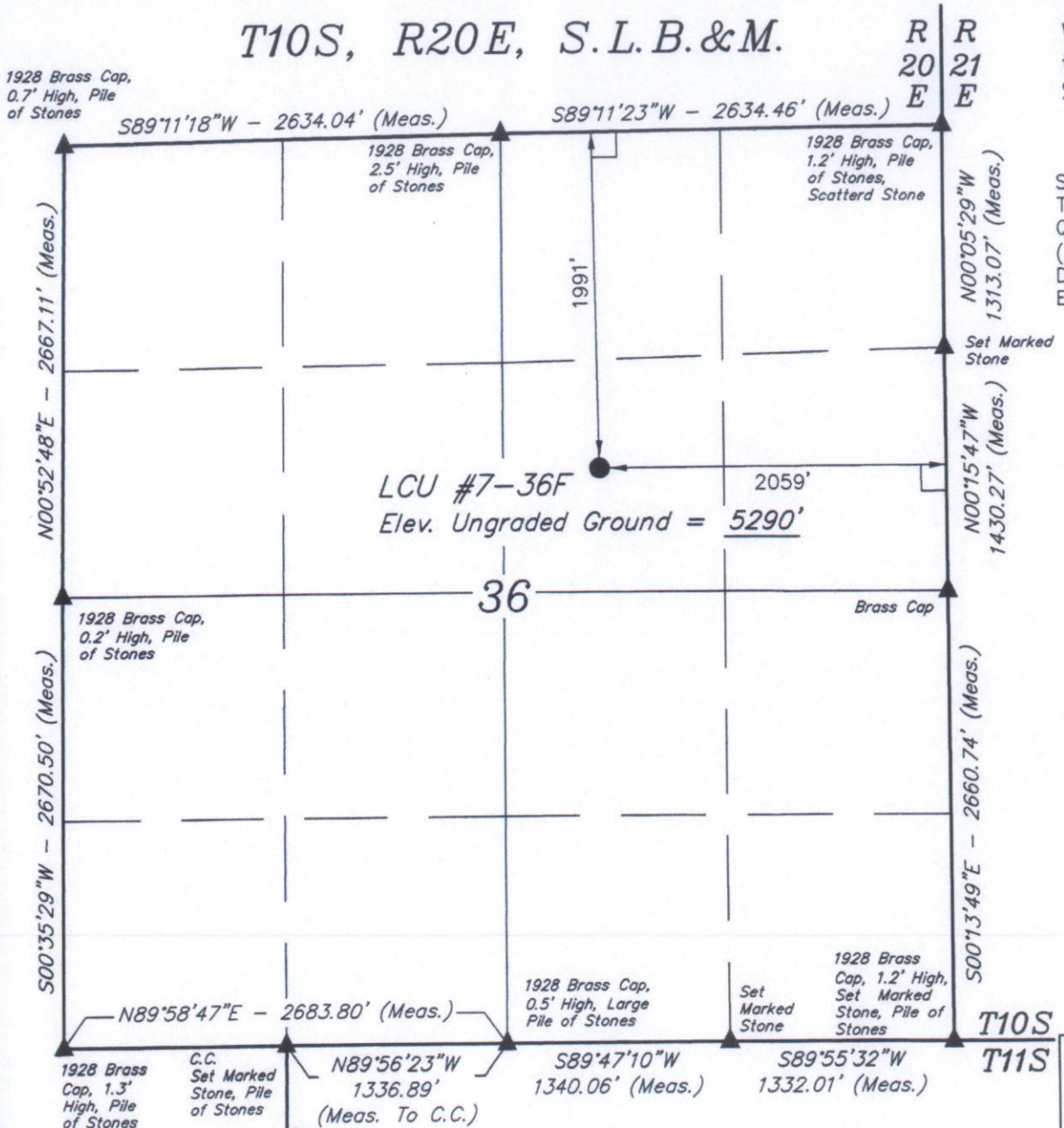
d. at 30 day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) shall be held open or the ball removed.

XTO ENERGY, INC.

Well location, LCU #7-36F, located as shown in the SW 1/4 NE 1/4 of Section 36, T10S, R20E, S.L.B.&M., Uintah County Utah.

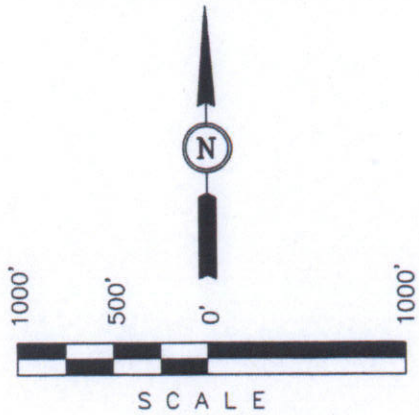


BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 20, T10S, R20E, S.L.B.&M., TAKEN FROM THE BIG PACK MTN. NW, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5251 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

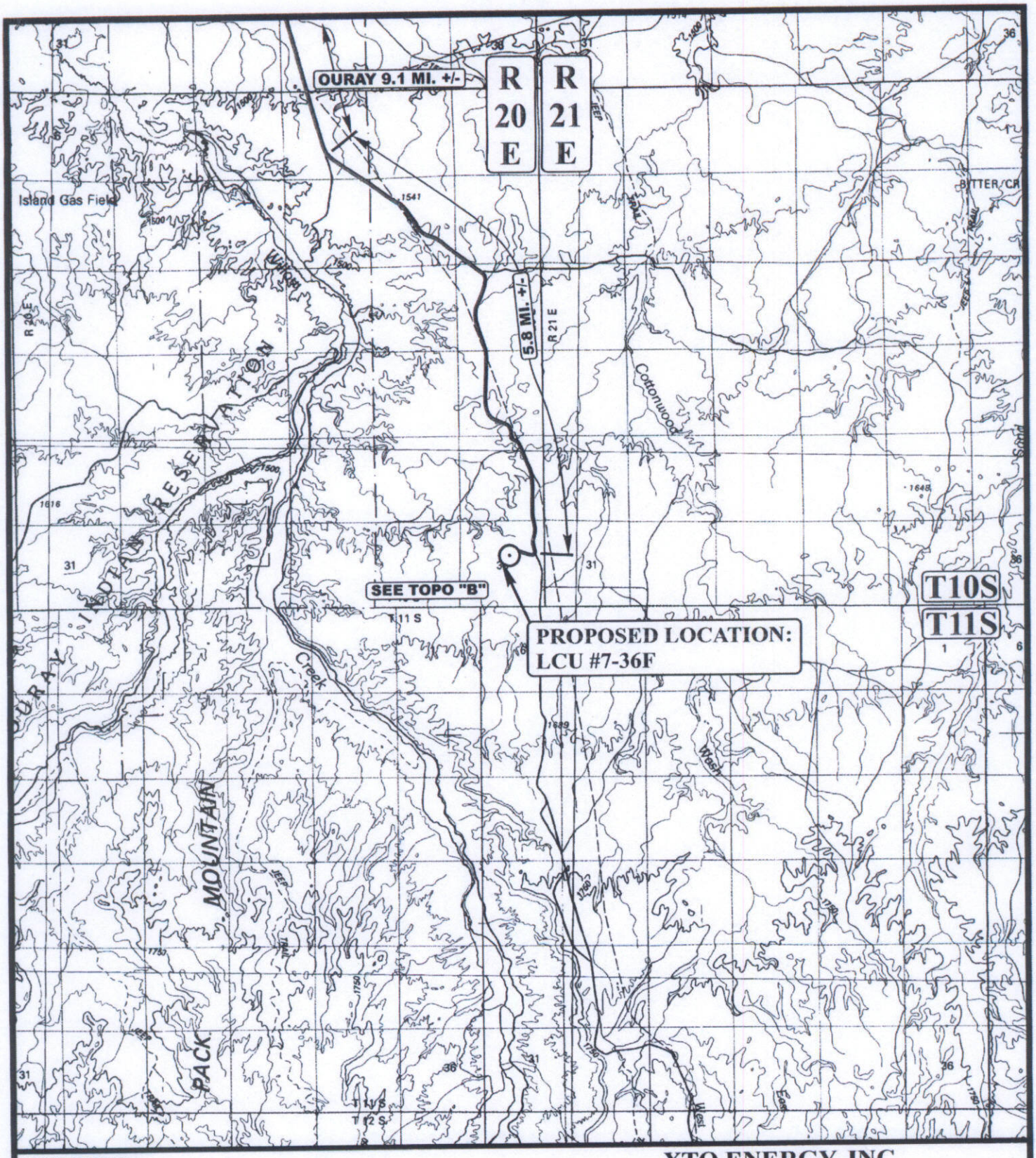
▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 39°54'21.38" (39.905939)
LONGITUDE = 109°36'41.02" (109.611394)
(NAD 27)
LATITUDE = 39°54'21.50" (39.905972)
LONGITUDE = 109°36'38.54" (109.610706)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE: 1" = 1000'	DATE SURVEYED: 09-13-07	DATE DRAWN: 09-18-07
PARTY: B.B. K.D. S.L.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: XTO ENERGY, INC.	

API Well Number: 43047521060000



LEGEND:

⊙ PROPOSED LOCATION

N

XTO ENERGY, INC.

LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: Z.L.	REVISED: 00-00-00		

EXHIBIT A

SURFACE USE PLAN

Name of Operator: **XTO Energy Inc.**

Address: **382 CR 3100**
Aztec, NM 87410

Well Location: **LCU 7-36F**
Surface: 1991" FNL & 2059' FEL, SW/4 NE/4
Section 36, T10S, R20E, SLB&M, Uintah County, Utah

The surface owner or surface owner representative and dirt contractor will be provided with an approved copy of the surface use plan of operations and approved conditions of approve before initiating construction.

1. Existing Roads:

a. The proposed access route to the location shown on the USGS quadrangle map (see Exhibit "A").

b. The proposed well site is located approximately 13.11 miles southwest of Ouray, Utah.

c. Proceed in a westerly direction from Vernal, Utah along U.S. Highway 40 for approximately 14.0 miles to the junction of State Highway 88. Exit left and proceed in a southerly direction for approximately 17.0 miles to Ouray, Utah. Proceed in a southerly direction for approximately 9.1 miles on the Seep Ridge Road to the junction of this road and an existing road to the west. Turn right and proceed in a westerly, then northerly direction for approximately 320' to the junction of road and an existing road to the southwest. Turn left and proceed in a southwesterly, then northwesterly direction for approximately 0.3 miles to the beginning of the proposed access to the southwest. Follow the road flags in a southwesterly direction for approximately 120' to the proposed location.

d. All existing roads within a one (1) mile radius of the proposed well site are shown in Exhibit "B". If necessary, all existing roads that will be used for access to the proposed well location will be maintained to the current condition, or better, unless BLM ort SITLA approval or consent is given to upgrade the existing road(s).

e. The use of roads under State and County Road Department maintenance are necessary to access the Little Canyon Unit Area. However, an encroachment permit is not anticipated since no upgrades to the State or County Road system are proposed at this time.

f. All existing roads will be maintained and kept in good repair during all phases of operation.

g. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

h. Since no improvements are anticipated to the to the State, County, Tribal or BLM access roads, no topsoil stripping will occur.

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i. An off-lease federal Right-of-Way is not anticipated for the access road since access presently exists to the lease boundary.

2. Planned Access Roads:

a. Location (centerline): From the existing LCU 6-36F an access is proposed trending southwest for approximately 102' to the proposed well site. The access consists of entirely new disturbance and crosses no significant drainages.

b. The proposed access road will consist of a 24' travel surface within a 30' disturbed area.

c. A road design plan is not anticipated at this time.

d. SITLA approval to construct and utilize the proposed access road is requested with this application.

e. No turnouts are proposed since adequate site distance exists in all directions.

f. A maximum grade of 10% will be maintained throughout the project.

g. No gates or cattle guards are anticipated at this time.

h. Surface disturbance and vehicular travel will be limed to the approved location access road.

i. Adequate drainage structures and culverts will be incorporated into the road where practical.

j. No surfacing material will come from SITLA, Federal, or Tribal lands.

k. All access roads and surface disturbing activities will conform to the standards outlined in the Bureau of Land Management and Forest Service Publication: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (Gold Book – Fourth Edition – Revised 2007).

l. The operator will be responsible for all maintenance of the access roads, including any anticipated drainage structures.

m. Other: See general information below.

- If any additional Right-of-Way is necessary, no surface disturbing activities shall take place on the subject Right-of-Way until the associated APD is approved. The holder will adhere to conditions of approval in the Surface Use Program of the approved APD, relevant to any Right-of-Way facilities.
- If a Right-of-Way is secured, boundary adjustments in the lease or unit shall automatically amend this Right-of-Way to include that portion of the facilities no longer contained within the lease or unit. In the event of an automatic amendment to this Right-of-Way grant, the prior on-lease/unit conditions of approval of this facility will not be affected even though they would now apply to facilities outside of the lease/unit as a result of a boundary adjustment. Rental fees, if appropriate shall be recalculated based on the conditions of this grant and the regulations in effect at the time of an automatic amendment.

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- If at any time the facilities located on public lands authorized by the terms of this lease are no longer included in the lease (due to a contraction in the unit or lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligations as determined by the BLM.
- If the well is productive, the access road will be rehabilitated as needed and brought to Resource (Class II) Road Standards within a time period specified by SITLA or the BLM. If upgraded, the access road must be maintained at these standards until the well is properly abandoned. If this time frame cannot be met, the Field Office Manager will be notified so that temporary drainage control can be installed along the access road.

3. Location of Existing Wells:

a. All wells in a one (1) mile radius are shown within Exhibit "C".

4. Location of Existing and or Proposed Production Facilities:

a. On-site facilities: Typical on-site facilities will consist of a wellhead, flowlines (typically 3" dia.), artificial lifting system (if necessary), wellhead compression (if necessary), gas/oil/water separator (3 phase), gas measurement and water measurement equipment, and a heated enclosure/building for weather and environmental protection. The tank battery will typically be constructed and surrounded by a berm of sufficient capacity to contain 1 ½ times the storage capacity of the largest tank. The tanks typically necessary for the production of this well will be 1 – 300 bbl steel, above ground tank for oil/condensate and 1 – 300 bbl steel, above ground tank for produced water. All loading lines and valves for these tanks will be placed inside the berm surrounding the tank battery.

- All oil/condensate production and measurement shall conform to the provision of 43 CFR 3162.7 and Onshore Oil and Gas Order No. 4, if applicable. Other on-site equipment and systems may include methanol injection and winter weather protection.
- All permanent (in place for six (6) months or longer) structures constructed or installed on the well site location will be painted a flat, non-reflective color, matching the ground and not sky, slightly darker than the adjacent landscape, as specified by the COA's in the approved APD. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupations Safety and Health Act (OSHA) may be excluded.
- Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 will be adhered to.

b. Off- site facilities: None.

c. A gas meter run will be constructed and located on lease within 500 feet of the well head. Meter runs will be housed and/or fenced. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

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d. A tank battery will be constructed on this lease; it will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All liquid hydrocarbons production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 4 and Onshore Oil and Gas Order No. 5 for natural gas production and measurement.

e. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

f. A pipeline corridor containing a single steel gas pipeline and a single steel or poly water pipeline is associated with this application and is being applied for at this time. The proposed pipeline corridor will leave the northeast side of the well site and traverse 142' northeast to the existing LCU 6-36F pipeline corridor (see Exhibit "D").

g. The gas pipeline will be a 12" or less buried line and water pipeline will be 12" or less buried line within a 75' wide disturbed pipeline corridor. The use of the proposed well site and access roads will facilitate as the staging area for the pipeline corridor construction. A new buried pipeline corridor length of approximately 142' is associated with this well.

h. An existing pipeline corridor upgrade is proposed from the proposed tie-in location between the LCU 6-36F and the LCU 8-36F locations to the LCU compressor facility along the existing pipeline route.

i. The gas pipeline will be a 12" or less buried line and the water pipeline will be a 12" or less buried line within a single trench and within a 75' wide disturbed pipeline corridor. The use of the existing well site and access roads will facilitate the staging of the pipeline corridor upgrade. An upgrade to a 75' wide buried pipeline corridor of approximately 0.9 miles is associated with this application.

j. The proposed pipeline and pipeline upgrade are contained within SITLA surface.

k. XTO Energy Inc. intends to bury the pipeline where possible and connect the pipeline together utilizing conventional welding technology.

5. <u>Location and Type of Water Supply:</u>

a. No water supply pipeline will be laid for this well.

b. No water well will be drilled for this well.

c. Drilling water for this well will be hauled on the road(s) shown in Exhibit "B".

d. Water will be hauled from one of the following sources:

- Water Permit #43-10447, Section 33, T8S, R20E;
- Water Permit # 43-2189, Section 33, T8S, R20E;
- Water Permit # 49-2158, Section 33, T8S, R20E;
- Water Permit # 49-2262, Section 33, T8S, R20E;
- Water Permit # 49-1645, Section 5, T9S, R22E;
- Water Permit # 49-9077, Section 32, T6S, R20E;
- Tribal Resolution 06-183, Section 22, T10S, R20E.

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6. Source of Construction Material:

a. The use of materials will conform to 43 CFR 3610.2-3.

b. No construction materials will be removed from SITLA, Ute Tribal or BLM Lands.

c. If any gravel is used, it will be obtained from a state approved gravel pit.

7. Methods of Handling Waste:

a. All wastes associated with this application will be contained and disposed of utilizing approved facilities.

b. Drill cuttings will be contained and buried on site.

c. The reserve pit will be located outboard of the location and along the northwest side of the pad.

d. The reserve pit will be constructed so as not to leak, breach, or allow for any discharge.

e. The reserve pit will be lined with a 20 ml minimum thickness plastic nylon reinforced liner material. The liner will overlay a felt liner pad only if rock is encountered during excavation. The pit liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe etc., that could puncture the liner will be disposed of in the pit. The pit walls will be sloped not greater than 2:1. A minimum 2-foot of freeboard will be maintained in the pit at all times during the drilling and completion operations.

f. The reserve pit has been located in cut material. Three sides of the reserve pit will be fenced before drilling starts. The fourth side with be fenced and a bird net installed as soon as drilling is completed, and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production will be rehabilitated.

g. No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.

h. Trash will be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container will be hauled off periodically to the approved Uintah County Landfill near Vernal, Utah.

i. Produced fluids from the well other than water will be produced into a test tank until such time as the construction of the production facilities is complete. Any spills of oil, gas, salt water or other produced fluids will be cleaned up and removed.

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j. After initial clean-up, a 400 bbl tank will be installed to contain produced waste water. This water will be transported from the tank to an approved XTO Energy Inc. disposal well for proper disposal.

k. Produced water from the production well will be disposed of at the RBU 13-11F or RBU 16-19F disposal wells in accordance with Onshore Order No. 7.

l. Any salts and/or chemical, which are an integral part of the drilling system, will be disposed of in the same manner as the drilling fluid.

m. Sanitary facilities will be onsite at all times during operations. Sewage will be placed in a portable chemical toilet and the toiled replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

8. Ancillary Facilities:

a. Garbage containers and portable toilets are the only ancillary facilities proposed in this application.

b. No camps, airstrips or staging areas are proposed with this application.

9. Well Site Layout: (See Exhibit "E")

a. The well will be properly identified in accordance with 43 CFR 3162.6.

b. Access to the well pad will be from the northeast.

c. The pad and road designs are consistent with BLM and SITLA specifications.

d. A pre-construction meeting with responsible company representatives, contractors, and SITLA will be conducted at the project site prior to commencement of surface disturbing activities. The pad and road will be construction staked prior to this meeting.

e. The pad has been staked at its maximum size; however, it will be constructed smaller, if possible, depending on rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.

f. All surface disturbing activities will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specification in the approved plans.

g. All cut and fill slopes will be such that stability can be maintained for the life of the activity.

h. Diversion ditches will be constructed and storm water BMP's installed around the well site to prevent surface water from entering the well site.

i. The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.

j. The reserve pit will be properly fenced and a bird net installed to prevent any livestock, wildlife or migratory bird entry, and will remain so until site clean-up.

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k. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic. The road will be maintained in a safe and useable condition.

l. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a windrow on the uphill side of the location to prevent possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and/or contamination.

m. The blooie line will be located at least 100 feet from the well head.

n. Water injection may be implemented if necessary to minimize the amount of fugitive dust.

10. Plans for Restoration of the Surface (Interim Reclamation and Final Reclamation):

a. Site reclamation for the production well will be accomplished for the portions of the site not required for the continued operation of the well.

b. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. Once the reserve pit is dry, the plastic nylon liner shall be torn and perforated before backfilling of the reserve pit. The reserve pit and that torn portion of the location not needed for production facilities/operations will be re-contoured to match the appropriate natural contours of the area.

c. Following the BLM published Best Management Practices and per the signed 2009 Reclamation Plan, the interim reclamation will be completed within 90 days of well completion or 120 days of wells spud (weather permitting) to reestablish vegetation, reduce dust and erosion and compliment the visual resources of the area.

- All equipment and debris will be removed from the area proposed for interim reclamation and the pit area will be backfilled and re-contoured to match the surrounding topography.
- The area outside the rig anchors and other disturbed areas not needed for the operation of the well will be re-contoured to blend in with the surrounding topography and reseeded as prescribed by SITLA.
- Reclaimed areas receiving incidental disturbance during the life of the producing well will be re-contoured and reseeded as soon as practical.

d. The operator will control noxious weeds along the access road use authorizations, pipeline route authorizations, well sites, or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the SITLA or the appropriate County Extension Office. On SITAL administered land, it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or other possibly hazardous chemicals.

e. Prior to final abandonment of the site, all disturbed areas, including access roads will be scarified and left with a rough surface. The site will then be reseeded and/or planted as prescribed by SITLA. A SITLA recommended seed mix will be detailed within their approval documents.

RECEIVED: October 10, 2011

11. Surface and Mineral Ownership:

a. Surface Ownership – State of Utah – under the management of the SITLA – State Office, 675 East 500 South, Salt Lake City, Utah 84102; 801-538-5100.

b. Surface Ownership – State of Utah – under the management of the SITLA – State Office, 675 East 500 South, Salt Lake City, Utah 84102; 801-538-5100.

12. Other Information:

a. AIA Archaeological conducted a Class III archeological survey. A copy of the report was submitted under separate cover to the appropriate agencies with the first filing of this proposed APD

b. Alden Hamblin conducted a paleontological survey. A copy of the original report was submitted under separate cover to the appropriate agencies with the first filing of this proposed APD.

RECEIVED: October 10, 2011

API Well Number: 43047521060000

XTO ENERGY, INC.

LCU #7-36F

LOCATED IN UINTAH COUNTY, UTAH
SECTION 36, T10S, R20E, S.L.B.&M.

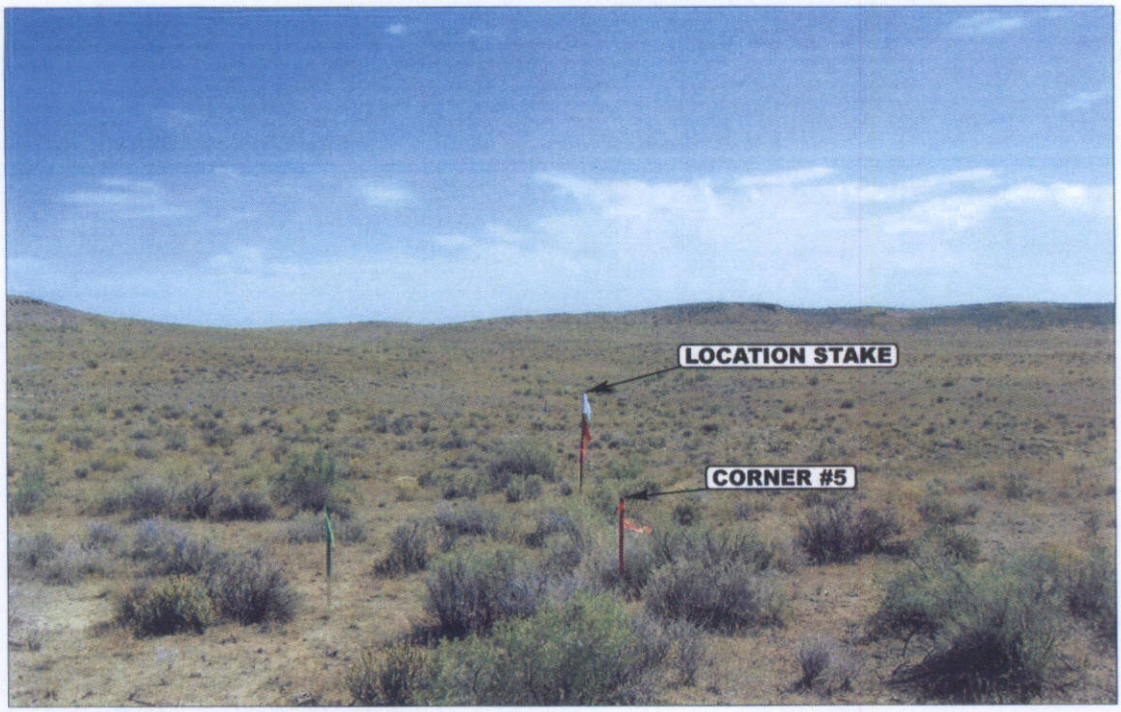


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: SOUTHEASTERLY**

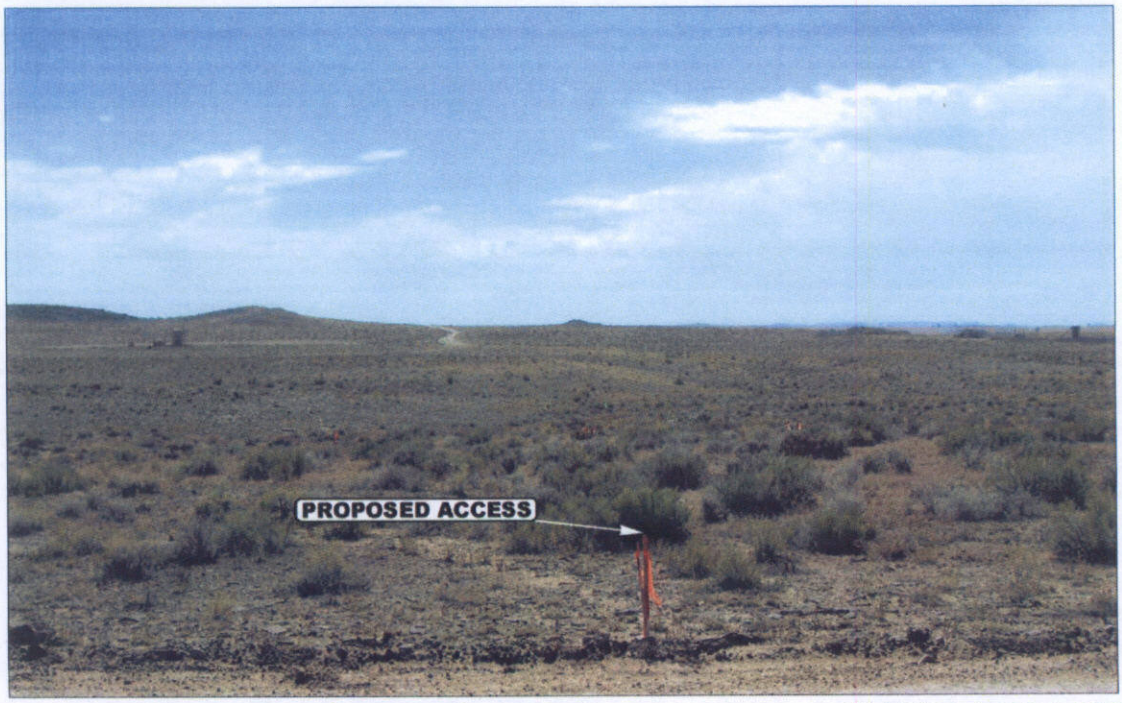


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS **CAMERA ANGLE: SOUTHERLY**

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS	09 MONTH	14 DAY	07 YEAR	PHOTO
TAKEN BY: D.R.	DRAWN BY: Z.L.	REVISED: 00-00-00		

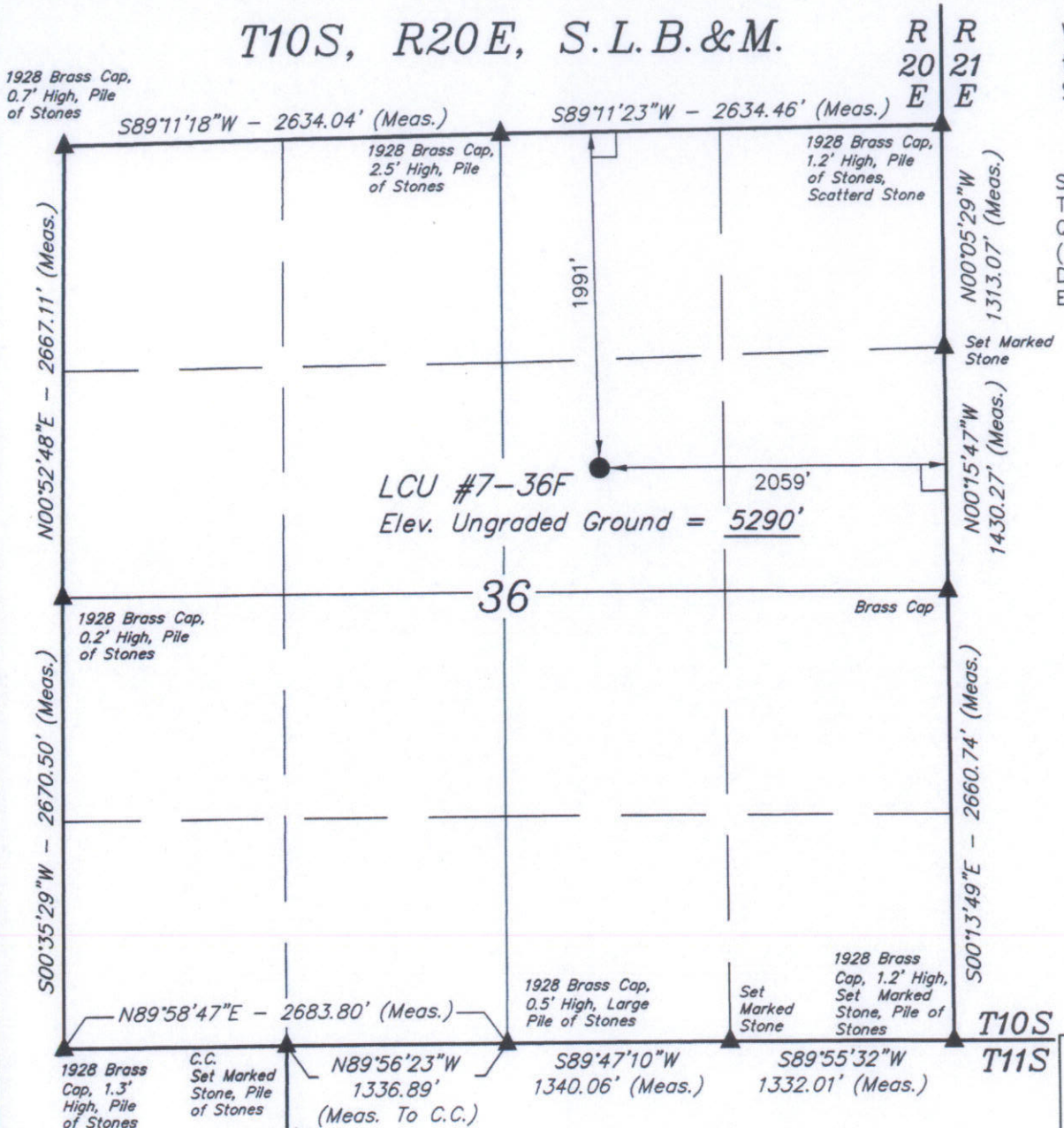
XTO ENERGY, INC.
LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 9.1 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXIISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 320' TO THE JUNCITON OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST: TURN LEFT AND PROCEED IN A SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 120' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 40.5 MILES.

XTO ENERGY, INC.

Well location, LCU #7-36F, located as shown in the SW 1/4 NE 1/4 of Section 36, T10S, R20E, S.L.B.&M., Uintah County Utah.

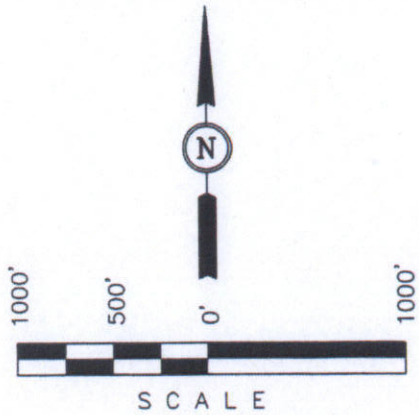


BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 20, T10S, R20E, S.L.B.&M., TAKEN FROM THE BIG PACK MTN. NW, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5251 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

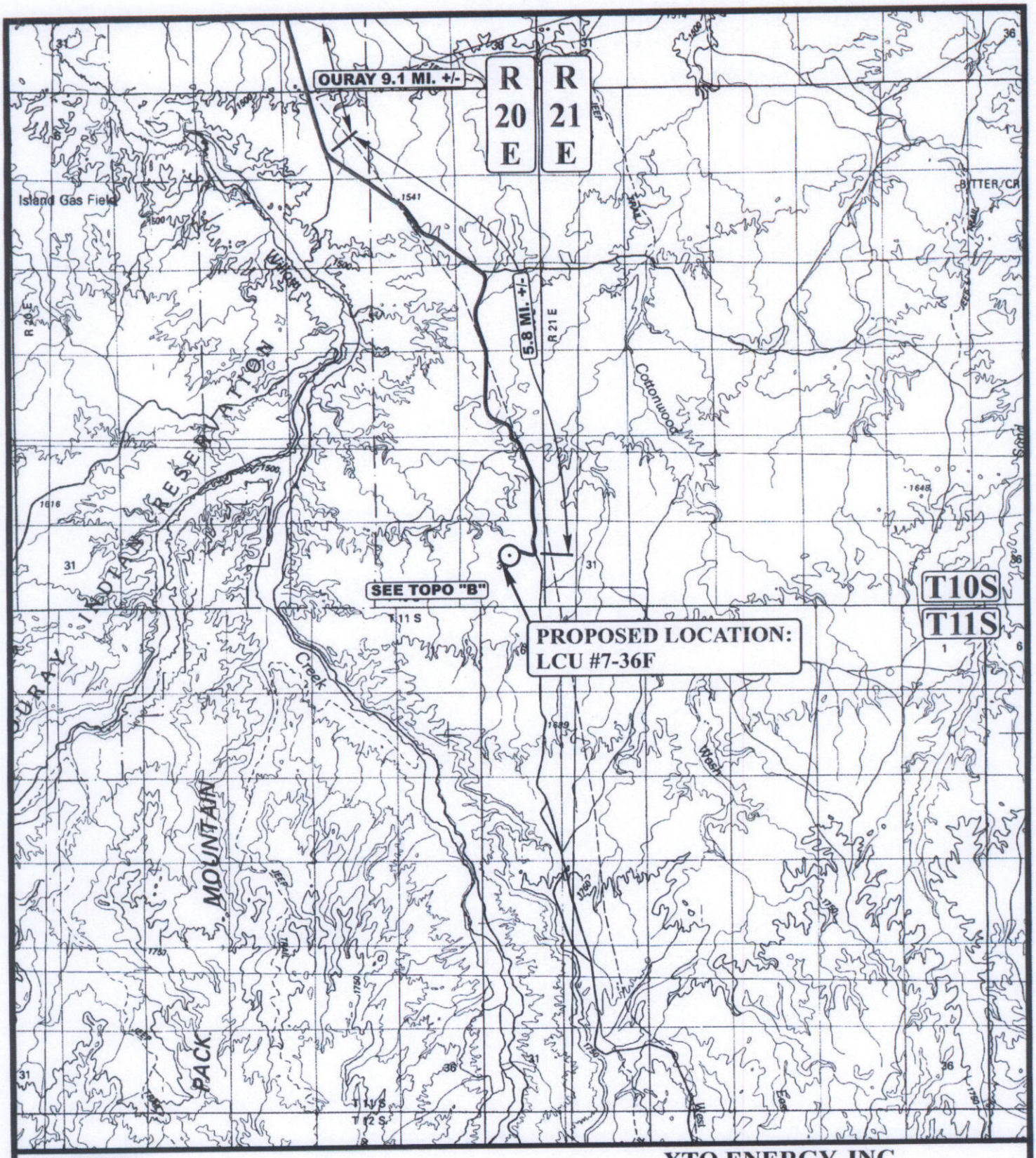
▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 39°54'21.38" (39.905939)
LONGITUDE = 109°36'41.02" (109.611394)
(NAD 27)
LATITUDE = 39°54'21.50" (39.905972)
LONGITUDE = 109°36'38.54" (109.610706)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE: 1" = 1000'	DATE SURVEYED: 09-13-07	DATE DRAWN: 09-18-07
PARTY: B.B. K.D. S.L.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: XTO ENERGY, INC.	

API Well Number: 43047521060000



LEGEND:

⊙ PROPOSED LOCATION

N

XTO ENERGY, INC.

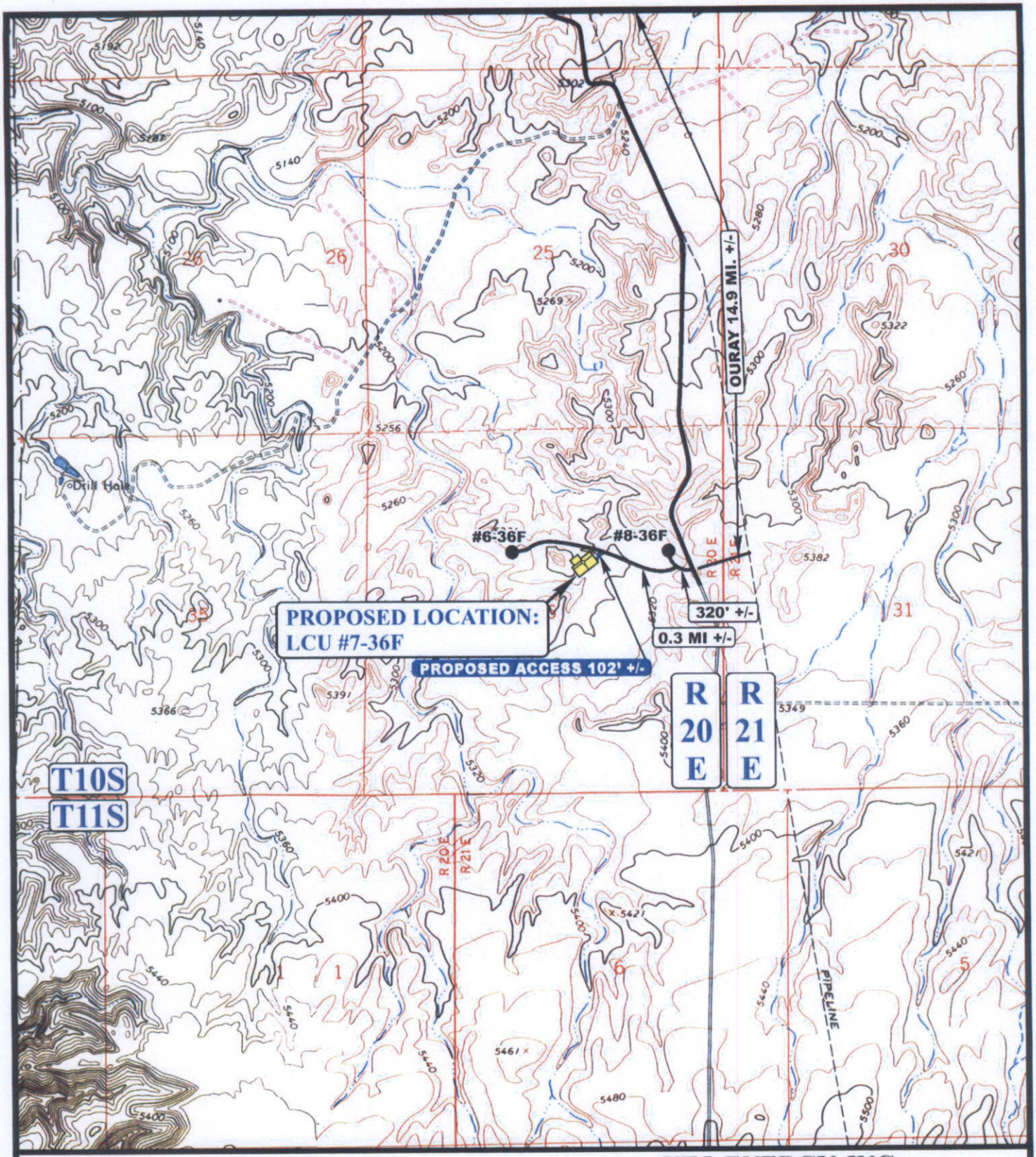
LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: Z.L.	REVISED: 00-00-00		

EXHIBIT A

API Well Number: 43047521060000



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

N

XTO ENERGY, INC.

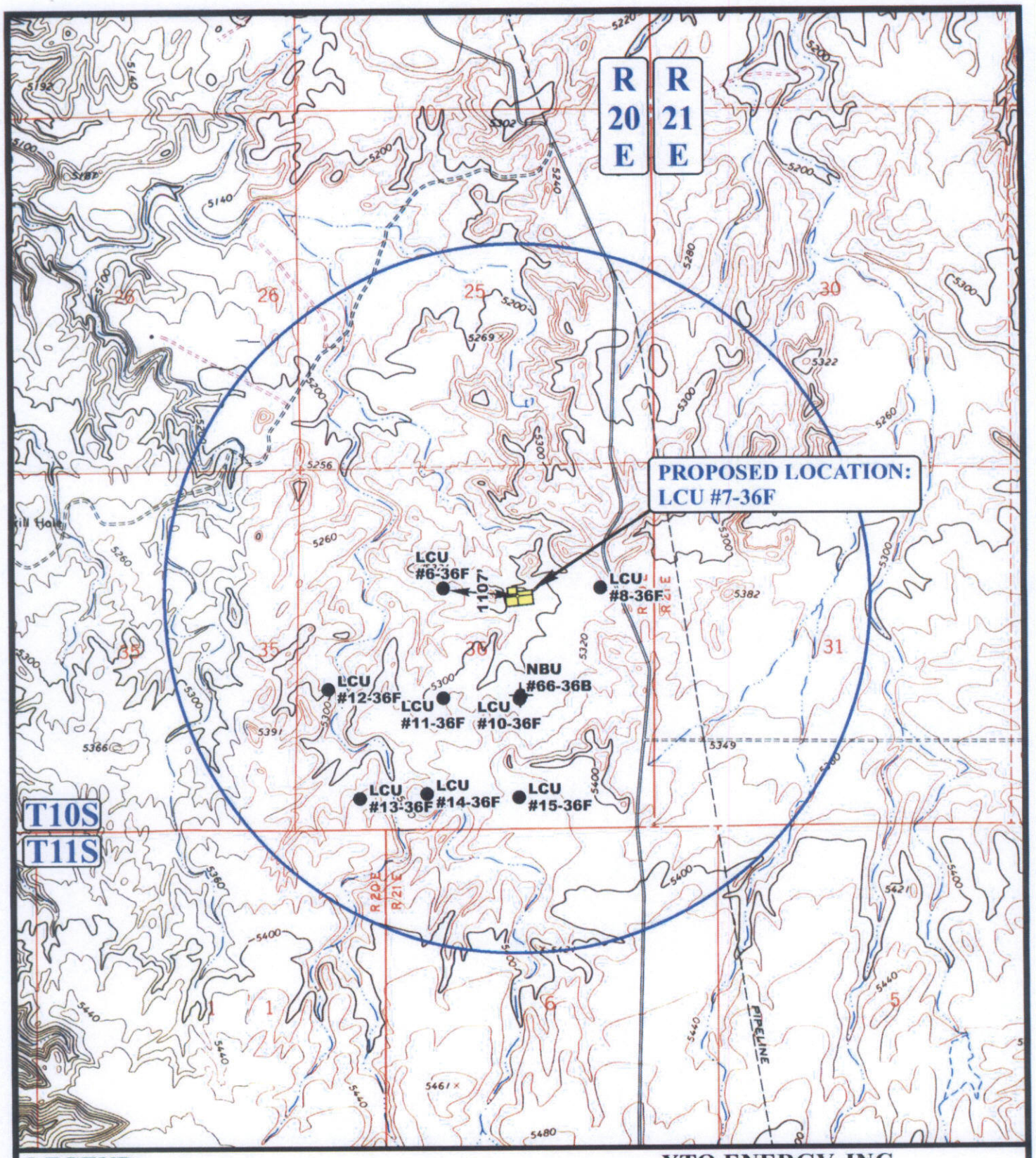
LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: Z.L.	REVISED: 00-00-00		

EXHIBIT B

API Well Number: 43047521060000



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

XTO ENERGY, INC.

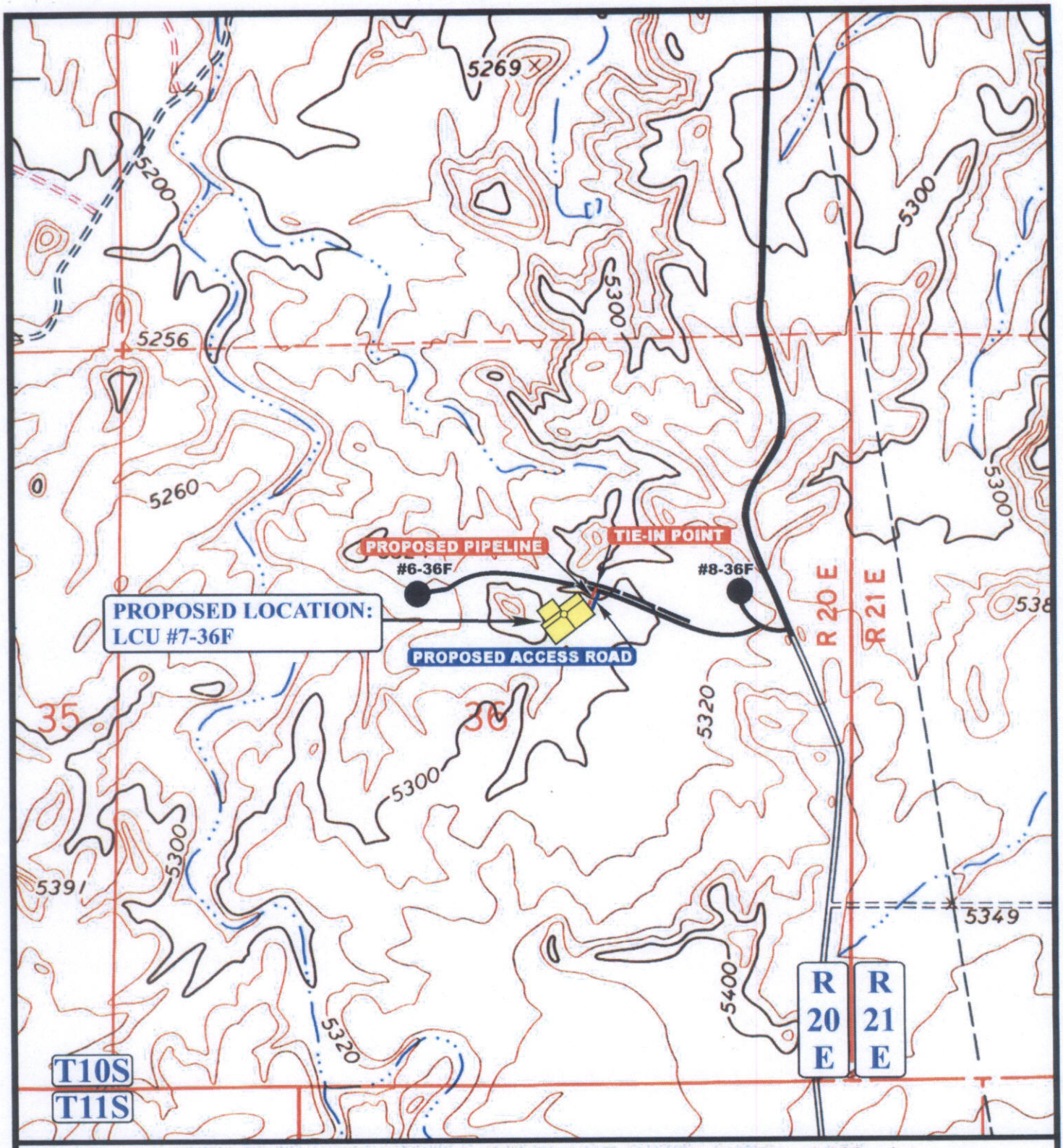
LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: Z.L.	REVISED: 00-00-00		

EXHIBIT C

API Well Number: 43047521060000



APPROXIMATE TOTAL PIPELINE DISTANCE = 142' +/-

LEGEND:

PROPOSED ACCESS ROAD

PROPOSED PIPELINE

PROPOSED PIPELINE (SERVICING OTHER WELLS)

N

XTO ENERGY, INC.

LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	09 MONTH	14 DAY	07 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: Z.L.	REVISED: 00-00-00		

EXHIBIT D

API Well Number: 43047521060000

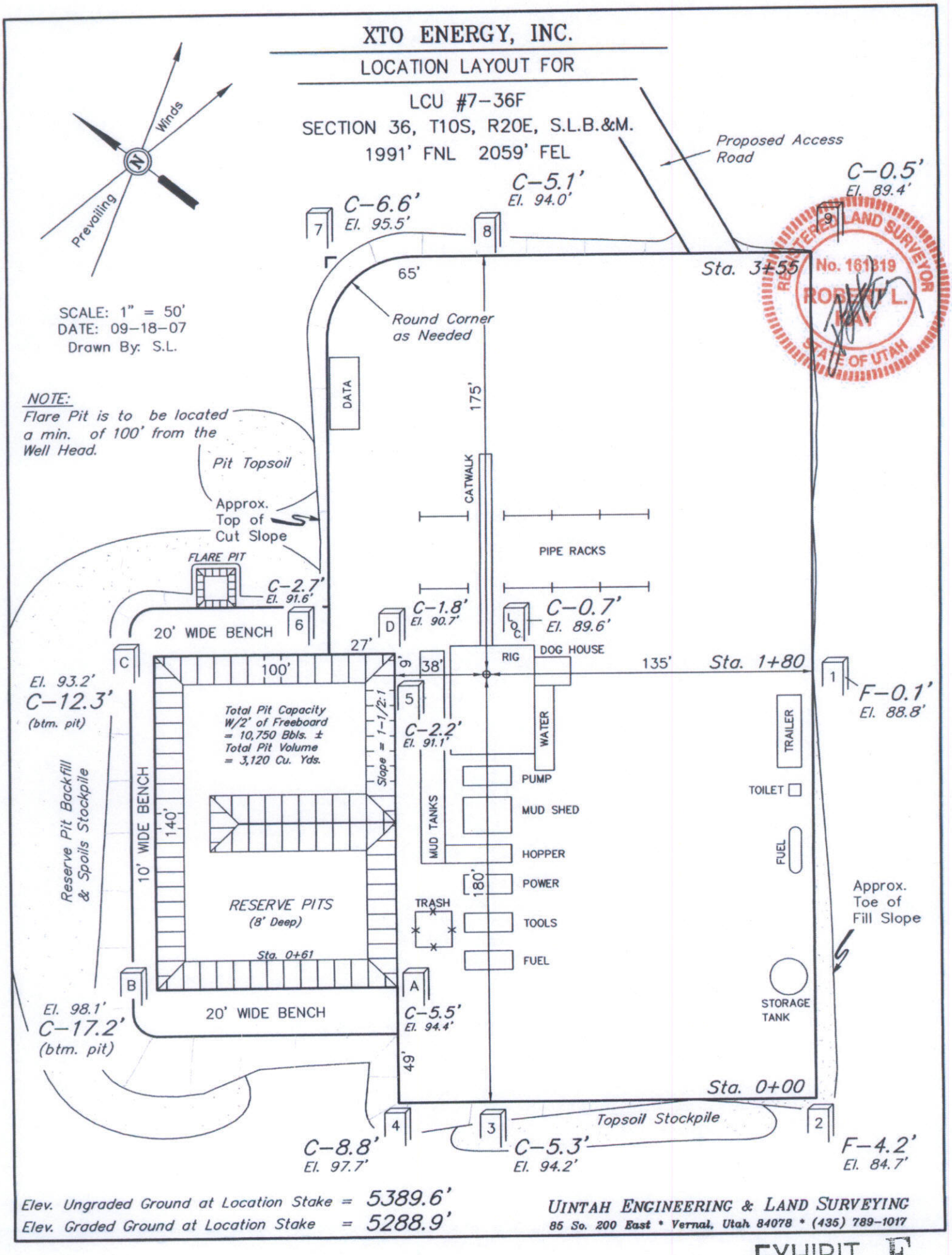


EXHIBIT E

API Well Number: 43047521060000

XTO ENERGY, INC.

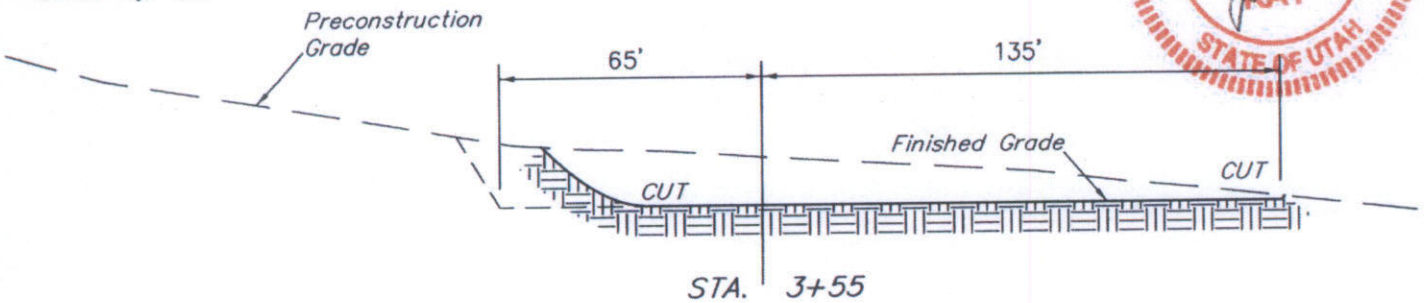
TYPICAL CROSS SECTIONS FOR

LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

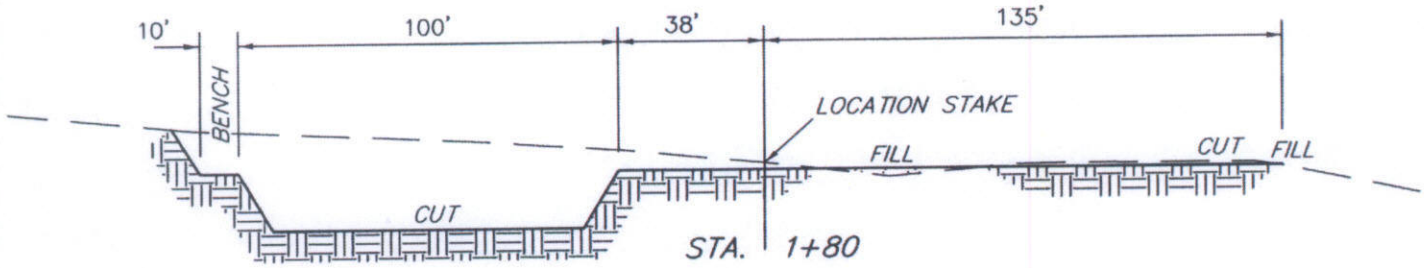
1" = 20'
X-Section Scale
1" = 50'

DATE: 09-18-07
Drawn By: S.L.

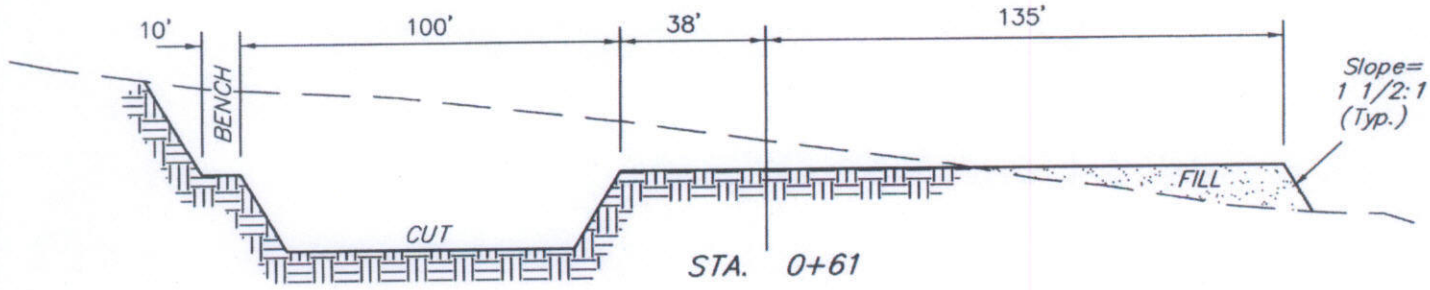
REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



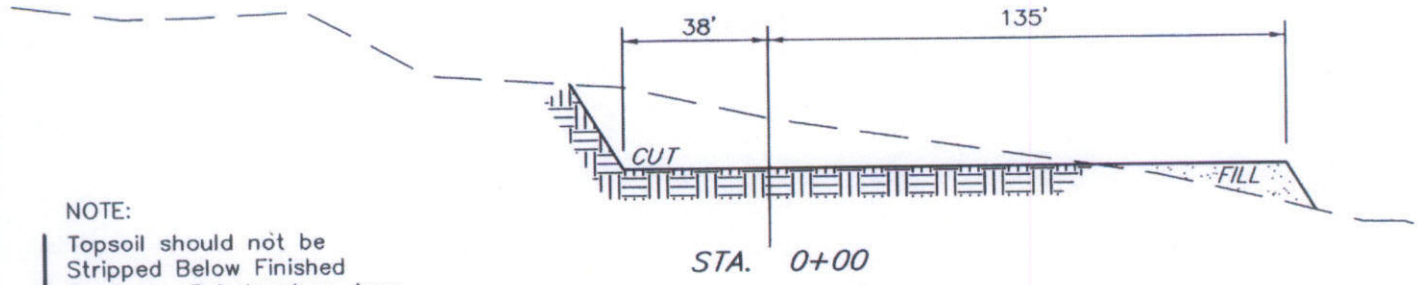
STA. 3+55



STA. 1+80



STA. 0+61



STA. 0+00

NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping = 1,790 Cu. Yds.

Remaining Location = 10,800 Cu. Yds.

TOTAL CUT = 12,590 CU.YDS.

FILL = 1,730 CU.YDS.

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

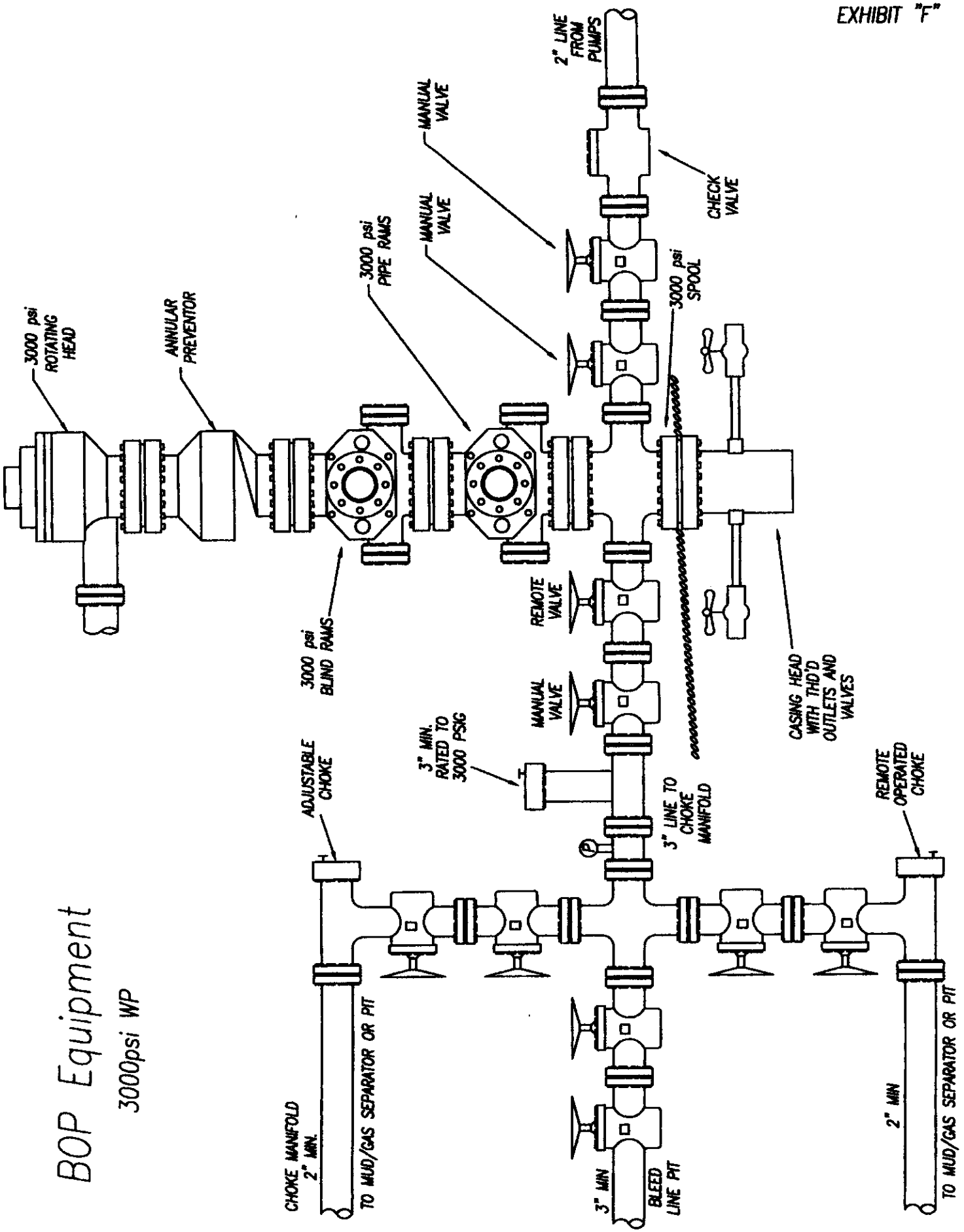
EXCESS MATERIAL = 10,860 Cu. Yds.

Topsoil & Pit Backfill (1/2 Pit Vol.) = 3,350 Cu. Yds.

EXCESS UNBALANCE (After Interim Rehabilitation) = 7,510 Cu. Yds.

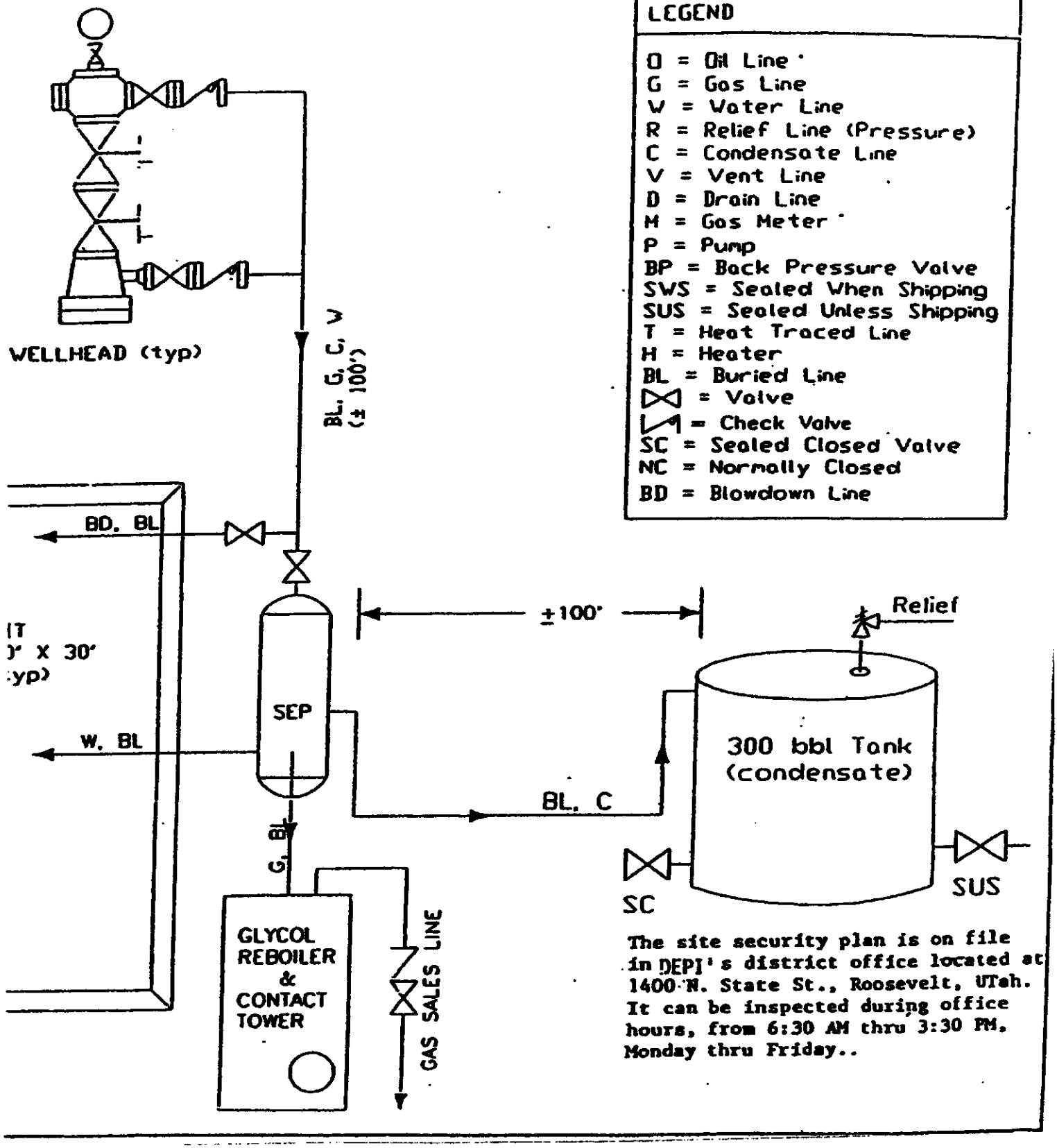
UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

EXHIBIT "F"



BOP Equipment

3000psi WP



The site security plan is on file in DEPI's district office located at 1400 N. State St., Roosevelt, UTah. It can be inspected during office hours, from 6:30 AM thru 3:30 PM, Monday thru Friday..

Operator Certification:

a. Permitting and Compliance:

Krista Wilson
Permitting Tech.
XTO Energy Inc.
382 CR 3100
Aztec NM 87410
505-333-3100

b. Drilling and Completions:

Justin Niederhofer
XTO Energy Inc.
382 CR 3100
Aztec, NM 87410
505-333-3100

c. Certification:

I hereby certify that, I or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or XTO Energy Inc., are responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 10th day of October, 2011.

Signature: Krista Wilson

Krista Wilson

API Well Number: 43047521060000

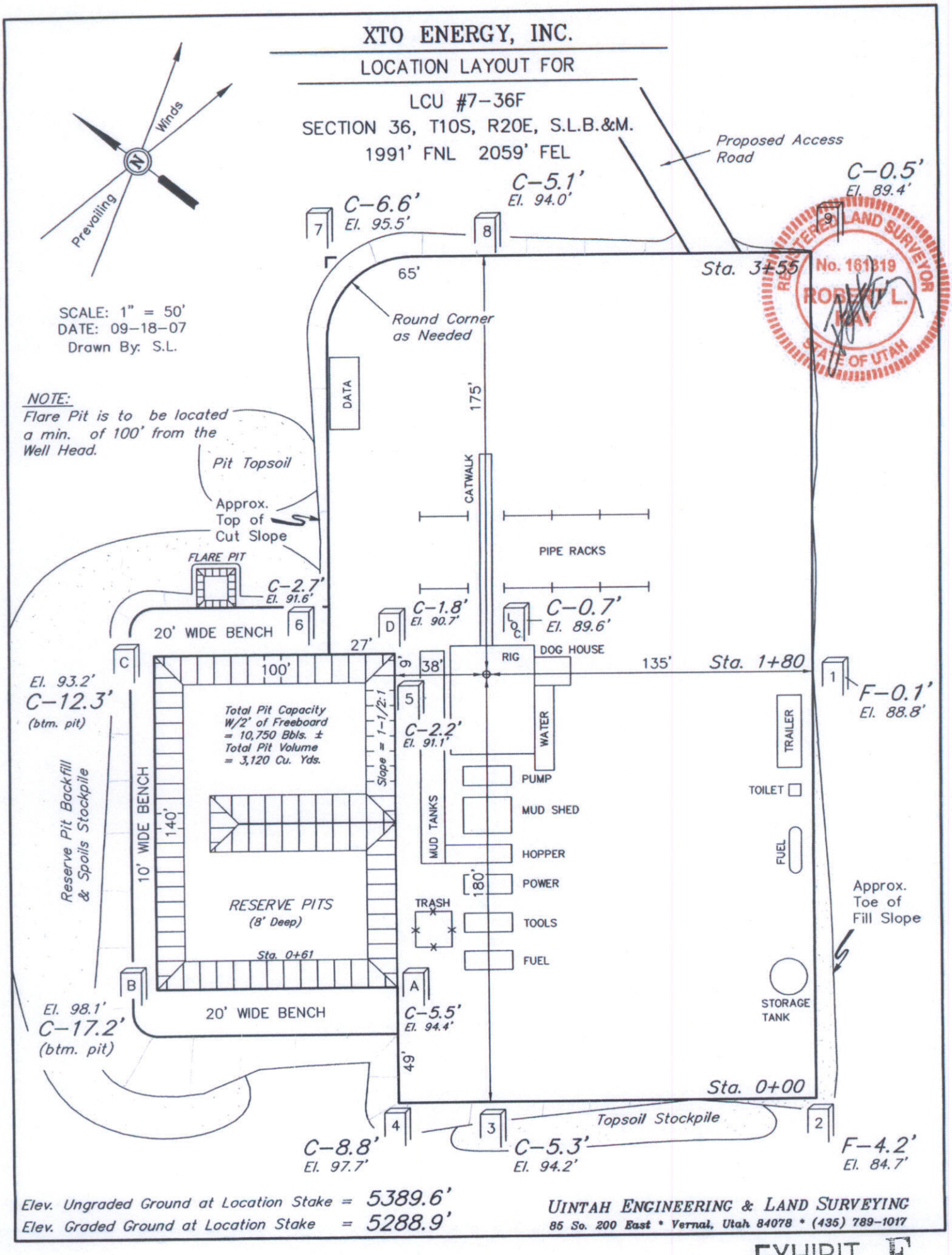


EXHIBIT E

API Well Number: 43047521060000

XTO ENERGY, INC.

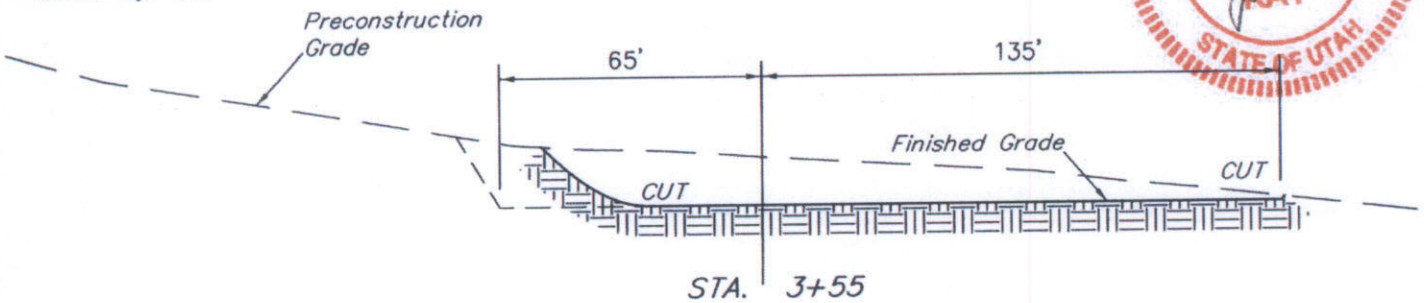
TYPICAL CROSS SECTIONS FOR

LCU #7-36F
SECTION 36, T10S, R20E, S.L.B.&M.
1991' FNL 2059' FEL

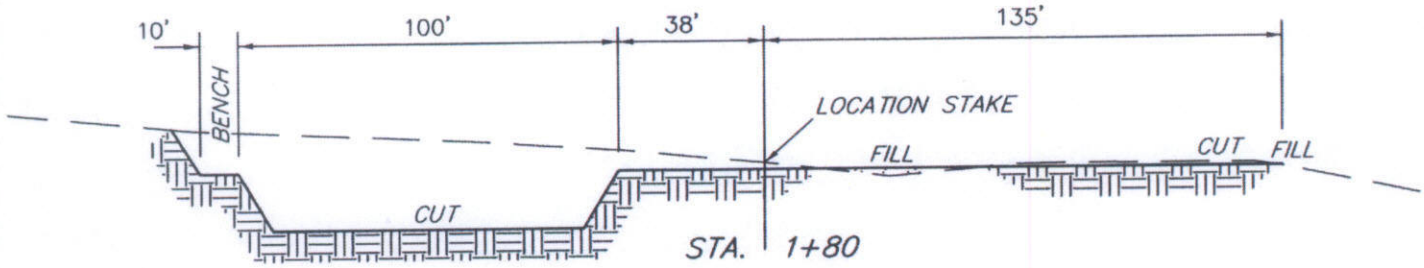
1" = 20'
X-Section Scale
1" = 50'

DATE: 09-18-07
Drawn By: S.L.

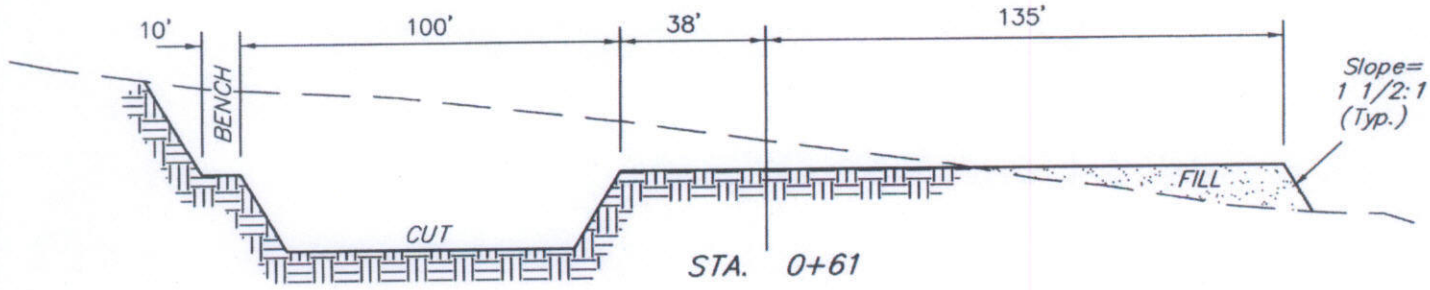
REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



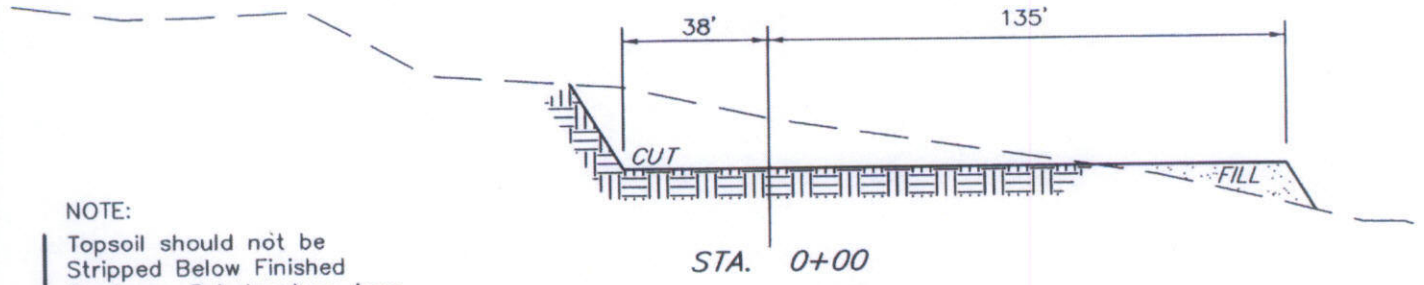
STA. 3+55



STA. 1+80



STA. 0+61



STA. 0+00

NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping = 1,790 Cu. Yds.

Remaining Location = 10,800 Cu. Yds.

TOTAL CUT = 12,590 CU.YDS.

FILL = 1,730 CU.YDS.

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

EXCESS MATERIAL = 10,860 Cu. Yds.

Topsoil & Pit Backfill (1/2 Pit Vol.) = 3,350 Cu. Yds.

EXCESS UNBALANCE (After Interim Rehabilitation) = 7,510 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

October 21, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Little Canyon Unit
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Little Canyon Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-52102	LCU 16-36F	Sec 36 T10S R20E 0815 FSL 0471 FEL
43-047-52103	LCU 2-2H	Sec 02 T11S R20E 2022 FNL 1954 FEL BHL Sec 02 T11S R20E 0724 FNL 2024 FEL
43-047-52104	LCU 4-2H	Sec 02 T11S R20E 1352 FNL 1891 FWL BHL Sec 02 T11S R20E 0725 FNL 0759 FWL
43-047-52106	LCU 7-36F	Sec 36 T10S R20E 1991 FNL 2059 FEL
43-047-52107	LCU 1-36F	Sec 36 T10S R20E 0782 FNL 0823 FEL
43-047-52108	LCU 2-36F	Sec 36 T10S R20E 0577 FNL 2112 FEL
43-047-52109	LCU 4-36F	Sec 36 T10S R20E 0860 FNL 0889 FWL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2011.10.21 15:17:02 -06'00'

RECEIVED: October 25, 2011

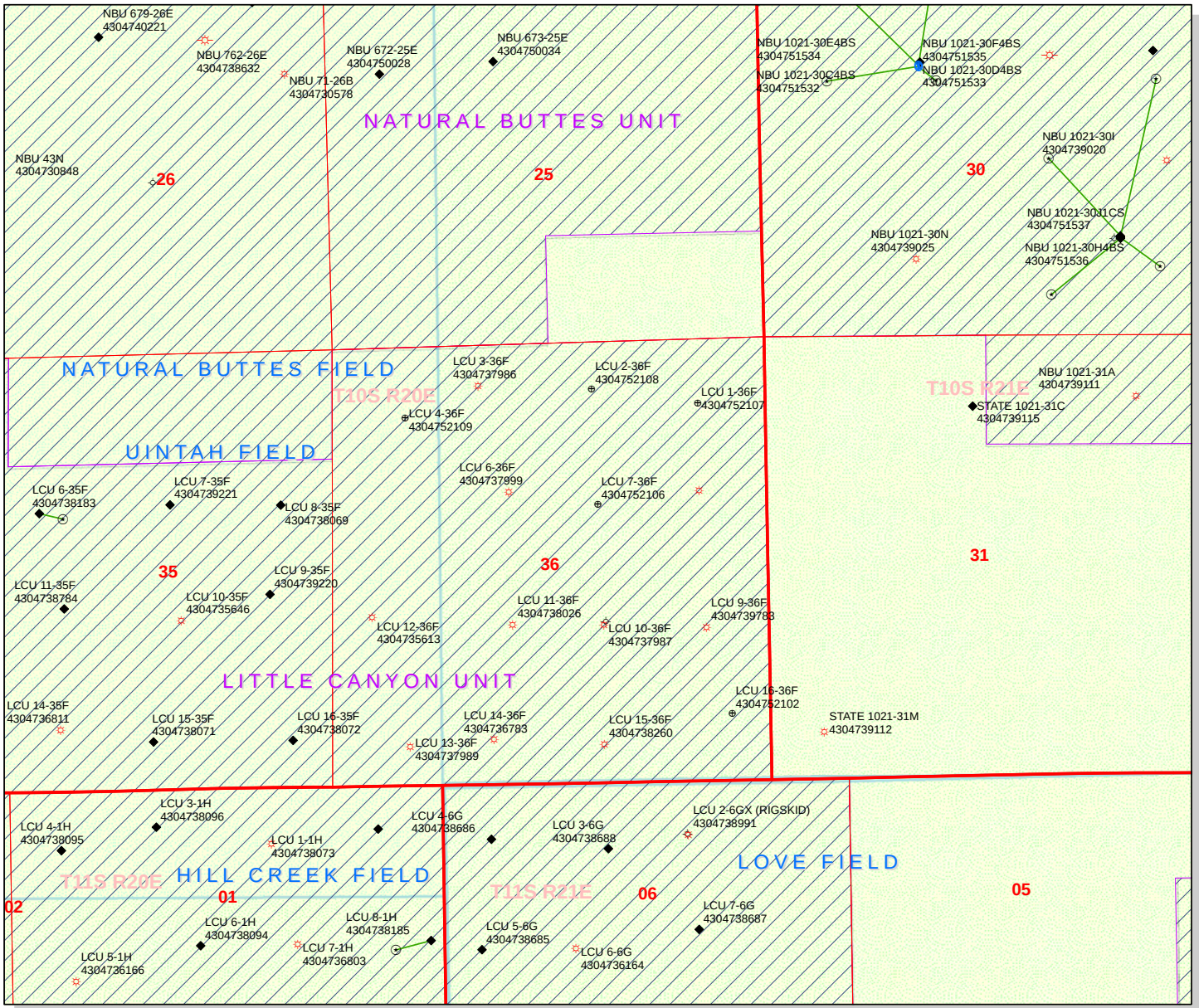
API Well Number: 43047521060000

bcc: File - Little Canyon Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:10-21-11

RECEIVED: October 25, 2011

API Well Number: 43047521060000



API Number: 4304752106

Well Name: LCU 7-36F

Township T1.0 . Range R2.0 . Section 36

Meridian: SLBM

Operator: XTO ENERGY INC

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields
STATUS
- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED

Wells Query
Status
- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LA - Location Abandoned
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- RET - Returned APD
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

1,600 800 0 1,600 Feet

1:15,079

API Well Number: 43047521060000

BOPE REVIEW XTO ENERGY INC LCU 7-36F 43047521060000

Well Name	XTO ENERGY INC LCU 7-36F 43047521060000			
String	Surf	Prod		
Casing Size(")	9.625	5.500		
Setting Depth (TVD)	2200	9090		
Previous Shoe Setting Depth (TVD)	0	2200		
Max Mud Weight (ppg)	8.4	9.2		
BOPE Proposed (psi)	0	3000		
Casing Internal Yield (psi)	3520	7740		
Operators Max Anticipated Pressure (psi)	4600	9.7		

Calculations	Surf String	9.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	961		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	697	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	477	NO	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	477	NO	Reasonable for area
Required Casing/BOPE Test Pressure=		2200	psi	
***Max Pressure Allowed @ Previous Casing Shoe=**		0	psi *Assumes 1psi/ft frac gradient	

Calculations	Prod String	5.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	4349		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3258	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2349	YES	OK
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2833	NO	OK
Required Casing/BOPE Test Pressure=		3000	psi	
***Max Pressure Allowed @ Previous Casing Shoe=**		2200	psi *Assumes 1psi/ft frac gradient	

Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
***Max Pressure Allowed @ Previous Casing Shoe=**			psi *Assumes 1psi/ft frac gradient	

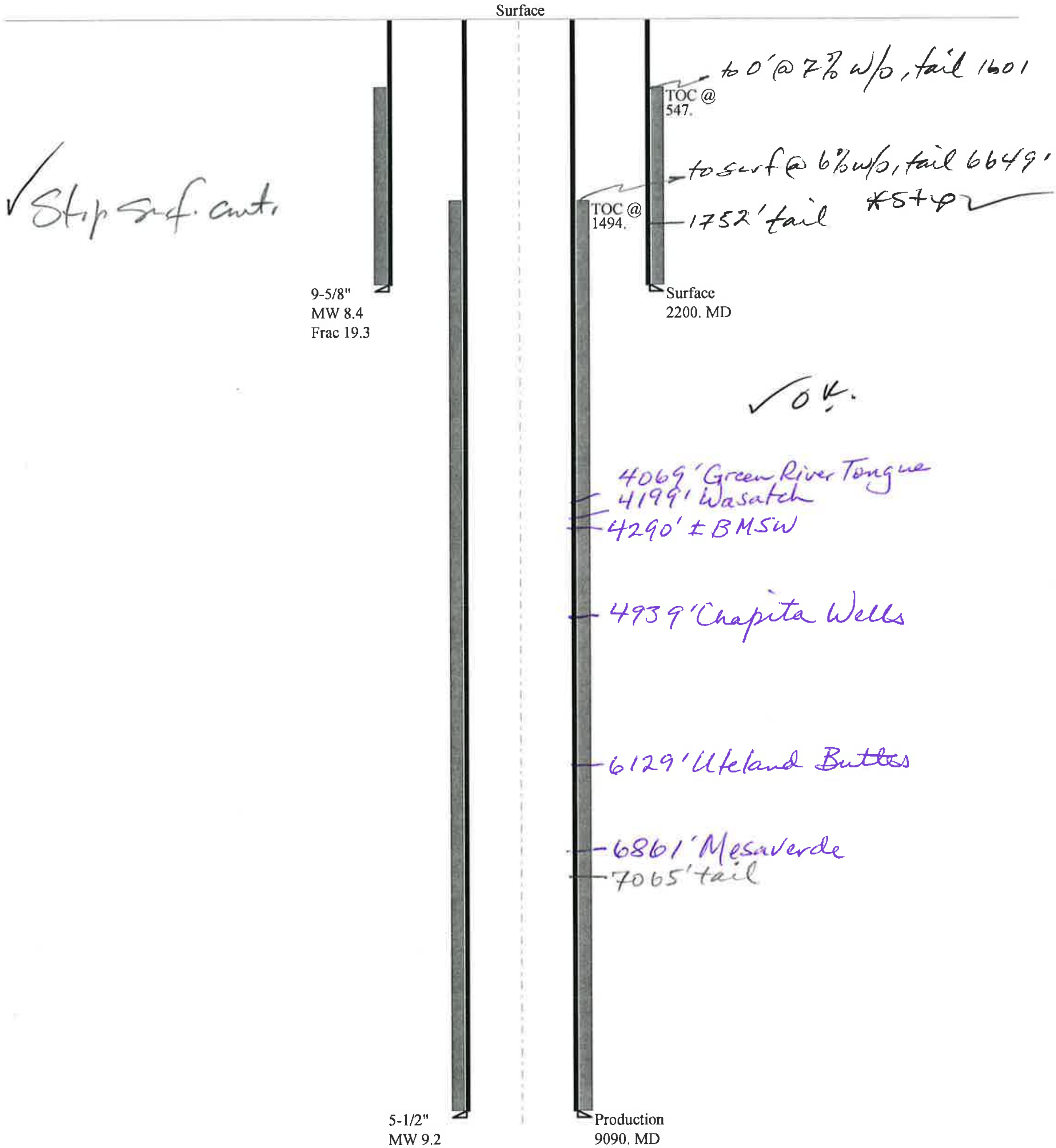
Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
***Max Pressure Allowed @ Previous Casing Shoe=**			psi *Assumes 1psi/ft frac gradient	

RECEIVED: January 18, 2012

API Well Number: 43047521060000

43047521060000 LCU 7-36F

Casing Schematic



Well name:	**43047521060000 LCU 7-36F**
Operator:	**XTO ENERGY INC**
String type:	Surface
Project ID:	43-047-52106
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,936 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,200 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 1,926 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 105 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 547 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 9,090 ft
Next mud weight: 9.200 ppg
Next setting BHP: 4,344 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,200 ft
Injection pressure: 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	2200	9.625	36.00	J-55	ST&C	2200	2200	8.796	19122

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	960	2020	2.104	2200	3520	1.60	79.2	394	4.97 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: January 5,2012
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**43047521060000 LCU 7-36F**
Operator:	**XTO ENERGY INC**
String type:	Production
Project ID:	43-047-52106
Location:	UINTAH COUNTY

Design parameters:

Collapse
Mud weight: 9.200 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,345 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,344 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 7,822 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 201 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,494 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	9090	5.5	17.00	N-80	LT&C	9090	9090	4.767	51235

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4344	6290	1.448	4344	7740	1.78	154.5	348	2.25 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: January 5,2012
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 9090 ft, a mud weight of 9.2 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

API Well Number: 43047521060000

From: Jim Davis
To: APD APPROVAL
CC: Diane_Jaramillo@xtoenergy.com; Kelly_Kardos@xtoenergy.com
Date: 2/23/2012 12:47 PM
Subject: APD approvals 10 for XTO

The following APDs have been approved by SITLA including arch and paleo clearance.

4304752053	AP 14-2J
4304752054	AP 16-2J
4304752055	AP 5-2JX
4304752102	LCU 16-36F
4304752103	LCU 2-2H
4304752104	LCU 4-2H
4304752106	LCU 7-36F
4304752107	LCU 1-36F
4304752108	LCU 2-36F
4304752109	LCU 4-36F

-Jim

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

RECEIVED: February 23, 2012

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator XTO ENERGY INC
Well Name LCU 7-36F
API Number 43047521060000 **APD No** 4776 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 SWNE **Sec** 36 **Tw** 10.0S **Rng** 20.0E 1991 FNL 2059 FEL
GPS Coord (UTM) 618759 4418037 **Surface Owner**

Participants

Misty Roberts (XTO), Brandon Bowthorpe (UELS), Jim Davis (SITLA), Krista Wilson (XTO), Damion Jones (XTO), Jody Mecham (XTO), Justin Justice (Kaufusi Excavating), Ben Williams (DWR)

Regional/Local Setting & Topography

This location sits directly north of the RNI Seep Ridge disposal ponds in the corner between ponds 6 and 4. The general area is approximately 14 miles southwest of Ouray, Utah and in an oil field Unit known as Little Canyon. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle to deep draws running westerly a distance of about 2-1/2 miles into Willow Creek. The draws are occasionally rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Willow Creek contains a perennial stream. No other seeps, springs or streams are known to exist in the area. An occasional pond collecting runoff for livestock and antelope occurs.

The LCU 7-36F proposed gas well is 14.9 miles southeast of Ouray and is accessed by the Seep Ridge Road and the road planned to LCU 8-36F well. A new road 0.3 miles in length will be constructed to the west from this location.

The location is on gentle southeast sloping terrain. Two shallow drainages begin within the location and will be filled during construction. No diversions around the location are needed. A larger drainage lies to the south and extends to the west toward Willow Creek.

Surface Use Plan

Current Surface Use
Industrial
Wildlfe Habitat

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.1	**Width** 200 **Length** 355	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Moderately vegetated with curly mesquite, winter fat, globe mallow, pepper grass, horsebrush, shadscale, broom snake weed, budsage, horsebrush, cheat grass and mustard weed.

Antelope, coyotes, rabbits and miscellaneous small mammals and birds.

Soil Type and Characteristics

Moderately deep sandy loam with few small surface rock.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? Y

Constructed drainage around northwest corner of SeepRidge Pond 6 must be protected.

Berm Required? Y

Around north east corner of location toward RNI pond

Erosion Sedimentation Control Required? N

Paleo Survey Run? **Paleo Potental Observed?** N **Cultural Survey Run?** Y **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	300 to 1320	10	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)	10 to 20	5	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	30	1 Sensitivity Level

Characteristics / Requirements

A 100’ x 140’ x 8’ deep reserve pit is planned in an area of cut on the northwest side of the location. It will be lined with a 16-mil liner with an appropriate thickness of felt sub-liner.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** Y

Other Observations / Comments

I have informed RNI management of the stipulation placed on this well pad construction and asked that when location construction begins that they ensure the pond dike and drainage diversion are not disturbed.

Richard Powell	10/19/2011
Evaluator	**Date / Time**

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
4776	43047521060000	LOCKED	GW	S	No
Operator	XTO ENERGY INC		**Surface Owner-APD**		
Well Name	LCU 7-36F		**Unit**	LITTLE CANYON	
Field	NATURAL BUTTES		**Type of Work**	DRILL	
Location	SWNE 36 10S 20E S 1991 FNL 2059 FEL GPS Coord (UTM) 618694E 4418242N				

Geologic Statement of Basis

XTO proposes to set 2,200 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 4,290 feet. A search of Division of Water Rights records shows 1 water well within a 10,000 foot radius of the proposed location. This well is over a mile from the proposed location. The well is owned by the BLM it is listed as used for stock watering. The well depth is listed as 2,500 feet. The surface formation at this location is he Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The proposed surface casing and cement should adequately protect any near surface aquifers. The production string cement should be brought up above the base of the moderately saline water to prevent it from mixing with fresher waters up hole.

Brad Hill — **APD Evaluator**

10/31/2011 — **Date / Time**

Surface Statement of Basis

This well is prosed immediately to the north of the RNI Seep Ridge disposal ponds. The location is immediately west of pond six and just north of pond 4. The south west corner (corner 9) is staked on the dike slope of pond 6 and if not pulled in would interfere with the disposal pond slope and leak detection. A man made drainage diversion around the north west corner of RNI seep ridge pond 6 would also be filled in and this may place storm water in the disposal pond leak detection. I discussed this with XTO representaive Jody Mecham and he agreed that the corner of this location must be pulled back far enough to not effect the disposal pond dike or drainage diversion. This will also require movement of lcoation access road to the north and west.

I have informed RNI management of the stipulation placed on this well pad construction and asked that when location construction begins that they ensure the pond dike and drainage diversion are not disturbed.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA attended this onsite but stated no concerns with this site. Ben Williams alos attended but stated not wildlife concerns.

Richard Powell — **Onsite Evaluator**

10/19/2011 — **Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.

RECEIVED: February 29, 2012

Application for Permit to Drill
Statement of Basis

Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Corner 9 of this location must be pulled back far enough so that the adjacent RNI disposal pond dike, leak detection, and drainage diversion are not disturbed.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

RECEIVED: February 29, 2012

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/10/2011 **API NO. ASSIGNED:** 43047521060000

WELL NAME: LCU 7-36F

OPERATOR: XTO ENERGY INC (N2615) **PHONE NUMBER:** 505 333-3647

CONTACT: Krista Wilson

PROPOSED LOCATION: SWNE 36 100S 200E **Permit Tech Review:** ✔

SURFACE: 1991 FNL 2059 FEL **Engineering Review:** ✔

BOTTOM: 1991 FNL 2059 FEL **Geology Review:** ✔

COUNTY: UINTAH

LATITUDE: 39.90595 **LONGITUDE:** -109.61141

UTM SURF EASTINGS: 618694.00 **NORTHINGS:** 4418242.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ML-47391 **PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

SURFACE OWNER: 3 - State **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ✔ **PLAT**
- ✔ **Bond:** STATE/FEE - 104312762
- ☐ **Potash**
- ✔ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ✔ **Water Permit:** 43-10447
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit: LITTLE CANYON

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ✔ **Drilling Unit**

Board Cause No: Cause 259-01

Effective Date: 8/18/2006

Siting: Suspends General Siting

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
5 - Statement of Basis - bhill
17 - Oil Shale 190-5(b) - dmason
25 - Surface Casing - hmacdonald

RECEIVED: February 29, 2012

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: LCU 7-36F
API Well Number: 43047521060000
Lease Number: ML-47391
Surface Owner: STATE
Approval Date: 2/29/2012

Issued to:
XTO ENERGY INC, 382 Road 3100, Aztec, NM 87410

Authority:
Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 259-01. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this

well:
- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
- Within 24 hours following the spudding of the well contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
  at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:
The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:
- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

March 20, 2013

Rick Redus
XTO Energy Inc.
382 Road 3100
Aztec, NM 87410

Re: APDs Rescinded for XTO Energy Inc.
Uintah/Emery County

Dear Mr. Redus:

Enclosed find the list of APDs that you requested to be rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective March 20, 2013.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal
SITLA, Ed Bonner

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114 -5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING

Fwd: APDs

Brad Hill <bradhill@utah.gov> Wed, Mar 20, 2013 at 2:35 PM
To: Diana Mason <DIANAWHITNEY@utah.gov>

Here are some you can get rid of.

---------- Forwarded message ----------
From: **Redus, Richard** <Richard_Redus@xtoenergy.com>
Date: Wed, Mar 20, 2013 at 2:31 PM
Subject: APDs
To: "bradhill@utah.gov" <bradhill@utah.gov>

Mr Hill,

Please cancel the below APD's as XTO will not be drilling these wells within the foreseeable future.

XTO ENERGY INC	4304737569	RBU 14-15F	DRILL	01/12/2006	01/12/2013
XTO ENERGY INC	4304752133	LCU 4-16H	DRILL	01/12/2012	01/12/2013
XTO ENERGY INC	4301530704	UT FED 18-7-22-24	DRILL	01/24/2007	01/24/2013
XTO ENERGY INC	4304737648	RBU 6-4E	DRILL	01/30/2006	01/30/2013
XTO ENERGY INC	4304737652	RBU 7-16F	DRILL	01/30/2006	01/30/2013
XTO ENERGY INC	4304737653	LCU 14-9H	DRILL	01/30/2006	01/30/2013
XTO ENERGY INC	4304751354	KC 15-32E	DRILL	02/03/2011	02/03/2013
XTO ENERGY INC	4304736295	RBU 10-21E	DRILL	02/09/2005	02/09/2013
XTO ENERGY INC	4304740524	RBU 30-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740529	RBU 21-24E	DRILL	02/10/2009	02/10/2013

XTO ENERGY INC	4304740530	RBU 28-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740531	RBU 23-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740532	RBU 31-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304740533	RBU 25-23E	DRILL	02/10/2009	02/10/2013
XTO ENERGY INC	4304739050	LCU 15-4H	DRILL	02/12/2007	02/12/2013
XTO ENERGY INC	4304739051	KC 15-31E	DRILL	02/21/2007	02/21/2013
XTO ENERGY INC	4304752053	AP 14-2J	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752054	AP 16-2J	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752055	AP 5-2JX	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752102	LCU 16-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752103	LCU 2-2H	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752104	LCU 4-2H	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752106	LCU 7-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752108	LCU 2-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304752109	LCU 4-36F	DRILL	02/29/2012	02/28/2013
XTO ENERGY INC	4304739068	KC 7-33E	DRILL	03/05/2007	03/05/2013
XTO ENERGY INC	4304739069	KC 13-33E	DRILL	03/05/2007	03/05/2013
XTO ENERGY INC	4304739070	KC 15-33E	DRILL	03/05/2007	03/05/2013
XTO ENERGY INC	4304737748	RBU 14-16F	DRILL	03/09/2006	03/09/2013

XTO ENERGY INC	4304740588	RBU 22-24E	DRILL	03/11/2009	03/11/2013
XTO ENERGY INC	4304740492	LCU 2-16H	DRILL	03/12/2009	03/12/2013
XTO ENERGY INC	4304740493	LCU 1-16H	DRILL	03/12/2009	03/12/2013
XTO ENERGY INC	4304739158	LCU 15-3H	DRILL	03/28/2007	03/28/2013
XTO ENERGY INC	4304739159	LCU 5-3H	DRILL	03/28/2007	03/28/2013

Rick Redus

Permitting Specialist

XTO Energy Western Division

Wrk: 303-397-3712

Cell: 720-539-1673

From: bradhill@utah.gov [mailto:bradhill@utah.gov]
Sent: Monday, March 04, 2013 1:20 PM
To: Redus, Richard
Subject: Sundry For API Well Number 43047364300000

Notice of Intent: APD_EXTENSION API Number: 43047364300000 Operator: XTO ENERGY INC Approved: 3/4/2013

--
Brad Hill P.G.
O & G Permitting Manager/Petroleum Geologist
State of Utah
Division of Oil, Gas, & Mining
Phone: (801)538-5315
Fax: (801)359-3940
email: bradhill@utah.gov